



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III  
CENTRAL REGIONAL LABORATORY  
839 BESTGATE ROAD  
ANNAPOLIS, MARYLAND 21401

435187  
301-224-2740  
FTS-922-3752

DATE : March 10, 1983

SUBJECT: Preliminary Assessment  
Miller Chemical and Fertilizer

FROM : George H. Houghton *gnh*  
Engineering Technician (3ES14)

TO : Thomas Massey  
Environmental Emergency Branch (3ES30)

Howard O. Wilson *How*  
Team Leader, Engineering Section (3ES14)

EPA Inspectors George Houghton and Ronald Jones met with Mr. Akskay Vidijarthi from the subject facility and Mr. C. James Leizear from the Maryland Dept. of Health, to determine the extent of contamination at the Whiteford, Maryland site. This meeting and inspection took place on October 19, 1982.

For approximately one year Miller Chemical and Fertilizer mixed chemical components to obtain herbicides and fungicides. This was a dry process. The mixing tanks were occasionally rinsed with water which was discharged to a ponded area. Ingredients of this herbicide included arsenic, copper, chromium and zinc. No organic chemicals were used. Mr. Vidijarthi indicated that minimal records were available on this process. As far as could be determined, some equipment was purchased in 1958 but the process was not in production until 1963. Production lasted until 1965. All the equipment was removed by 1968. Production was never really profitable due to technical problems and availability and cost of the raw materials. One product was sold by Miller under the name of 658-Fungicide.

The last reference, according to the state representative, to fungicide in the state files was about 5 years ago.

The ponds were drained and the land was graded in September, 1981. An engineering firm was used to ensure the natural contours of the land were preserved during reclamation. Maryland approved the engineering drawings for the remedial action. A notice was placed in the property deed to warn future owners of the possible contamination of hazardous waste (see attachment). As noted on the attached map (Map 2), the area between the lines N29°08'17"W and S40°24'02"E is the non-molest area where the ponds were located. This area is 10.3752 acres. An additional map (Map 1) which is a copy of the USGS quadrangle for Delta, Maryland (1956) shows the Whiteford area in general.

Whiteford Packing Company is adjacent to Miller Chemical and Fertilizer. For several years the water discharge from this firm flowed into the subject ponds. A pipe has now been installed which runs across the Miller Property and into a drainage area adjacent to Rt. 165 (see drawing). Whiteford's well overflows, almost constantly, into a drainage ditch and runs across Miller's property. This overflow, except for rain runoff, appears to be the only source of water on the Miller property. EPA sampled the water entering the Miller property from Whiteford Packing. The water leaving the non-molest zone was also sampled. A sediment sample was collected from the stream leaving the non-molest zone. Another water sample was collected from the domestic well on the Miller property. All these samples were submitted for analysis of arsenic, copper, chromium, and zinc.

A background soil sample was collected on January 5, 1983 from three (3) separate locations on and around Miller Chemical and Fertilizer property. These samples were homogenized as much as possible in a plastic bucket. The sample was split among the State of Maryland, Miller Chemical and Fertilizer, and EPA. Analyses for this sample will include: arsenic, copper, chromium, and zinc.

The approximate locations of the samples are shown on the attached map (Map 2).

A background sample was needed because no historical level of metals could be found for this area of Harford County.

Currently, Miller is blending dry fertilizer components to obtain a mixture as per customer specifications. This material is sold in bulk or in pre-packaged bags. The facility also carries a line of pre-packaged herbicides and other farm chemicals. None of these chemicals are blended or packaged on site.

Miller Chemical analyzed samples of the pond sediments after dewatering and no contamination was found (see attached results dated July 24, 1981).

Also attached is a copy of a letter from Maryland Department of Health informing Miller Chemical of the revocation of Hazardous Waste Permit (dated September 28, 1982).

Please refer to Table A for the soil analyses results. Levels of arsenic, copper and zinc were higher than background soil levels.

This could be caused by the process at Miller Chemical, but it also could be attributed to normal variations in soil. Based on this inspector's limited experience with soil analyses, the increase shown does not pose a threat. It is recommended that a toxicologist who is more familiar with the effects of metals in soil review this data and comment on the results.

As noted in the results of the concentration of chromium in the sediment leaving the non-molest area was lower than the background soil level. The difference could be normal sampling variations. Also this area of Maryland is known for Green Marble, and one of the constituents of this marble is chromium.

The liquid sampling results are attached to this report (Table B).

All levels were below the Safe Drinking Water Act (SDWA) action levels. It should be noted that, arsenic showed a definite increase in the downstream sample. The stream water entering the property had a concentration of 2.0 ug/L while the downstream sample indicated 23 ug/L.

As indicated earlier, the facility representative said that no organic chemicals were produced at the Whiteford site. A New York Times article dated February 15, 1983 stated otherwise: "On the EPA's 1979 list were 31 cities where plants produced chlorophenols. The manufacture of these chemicals produces dioxins, . . .". Among the cities mentioned was Whiteford, Maryland. The sediment sample collected in October, 1982 has been sent to another laboratory for dioxin analysis. The result will be forwarded upon completion.

Attachments  
a/s

GHH:t1b

Table A  
Miller Chemical & Fertilizer  
Sediment Sample

	<u>Background 1</u>	<u>Sediment from Stream Leading Non-Molest Area 1</u>
As	38	43
Cr	192	47
Cu	11	26
Zn	46	93

1 Values in milligrams/kilograms (mg/kg)

Table B

Miller Chemical & Fertilizer

Inspection Date: October 19, 1982

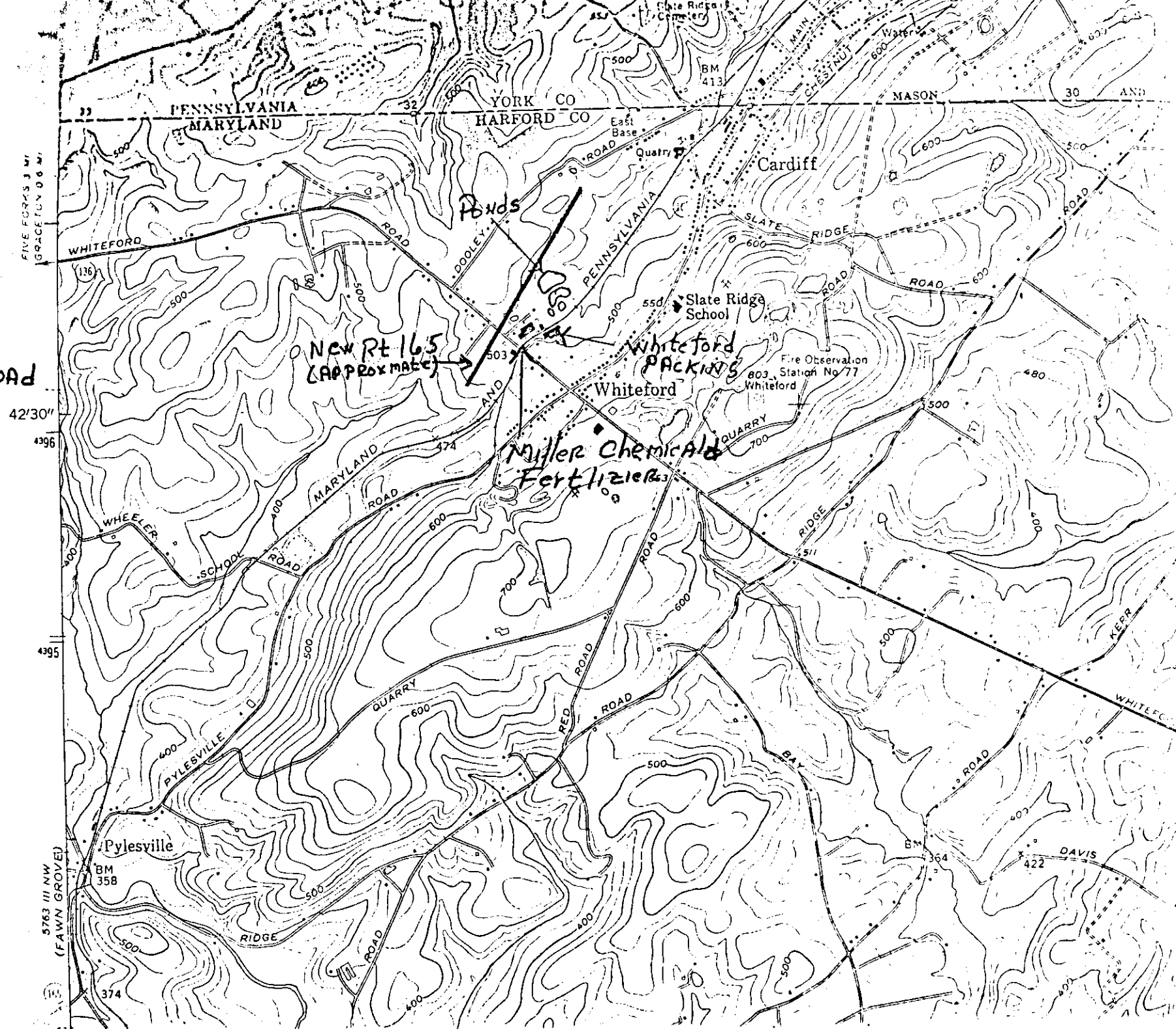
	<u>Location</u>			
	<u>Stream Entering Property</u>	<u>Downstream From Mixing Area</u>	<u>Facility Well</u>	<u>SDWA<sup>2</sup> Standards</u>
Arsenic <sup>1</sup>	< 2.0	23	< 2.0	50
Chromium	< 25	< 25	< 25	50
Copper	< 50	< 50	< 25	1000
Zinc	69	40	92	5000

1 All values in micrograms per liter (ug/L)

2 Safe Drinking Water Act Standards

MAP 1

MARYLAND  
Delta QUAD  
1956



Whiteford, Maryland



CURVE # 1			CURVE # 2
1362.30'	- RADIUS	-	344.64'
636.59'	- ARC	-	229.87'
630.96'	- CHORD	-	225.63'
S 50°41'57"W	- CHD. BEARING	-	S 74°49'06"W
20°11'19"	- DELTA	-	38°12'56"





# IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER <i>NO</i>	X	B. STORER <i>NA</i>	X	C. TREATER <i>NA</i>	X	D. DISPOSER <i>NO</i>
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

## E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

Blend Fertilizer For Sale  
Retail outlet for herbicides

# V. WASTE RELATED INFORMATION

## WASTE TYPE

☐ 1 UNKNOWN ☐ 2 LIQUID ☒ 3 SOLID ☐ 4 SLUDGE ☐ 5 GAS

## B. WASTE CHARACTERISTICS

☐ 1 UNKNOWN ☐ 2 CORROSIVE ☐ 3 IGNITABLE ☐ 4 RADIOACTIVE ☐ 5 HIGHLY VOLATILE  
☒ 6 TOXIC ☐ 7 REACTIVE ☐ 8 INERT ☐ 9 FLAMMABLE

☐ 10. OTHER (specify): Herbicide (As, Cu, Cr, Zn Tank wash)

## C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

N/A

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE		b. OIL		c. SOLVENTS		d. CHEMICALS		e. SOLIDS		f. OTHER	
AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE	AMOUNT	UNIT OF MEASURE
<u>NA</u>		<u>N/A</u>		<u>N/A</u>		<u>N/A</u>		<u>UNKNOWN</u>		<u>UNKNOWN</u>	
X (1) PAINT, PIGMENTS		X (1) OILY WASTES		X (1) HALOGENATED SOLVENTS		X (1) ACIDS		X (1) FLYASH		X (1) LABORATORY PHARMACEUT.	
(2) METALS SLUDGES		(2) OTHER (specify):		(2) NON-HALOGENATED SOLVENTS		(2) PICKLING LIQUORS		(2) ASBESTOS		(2) HOSPITAL	
(3) POTW				(3) OTHER (specify):		(3) CAUSTICS		(3) MILLING/ MINE TAILINGS		(3) RADIOACTIVE	
(4) ALUMINUM SLUDGE						(4) PESTICIDES		(4) FERROUS SMLTG. WASTES		(4) MUNICIPAL	
(5) OTHER (specify):						(5) DYES/INKS		(5) NON-FERROUS SMLTG. WASTES		X (5) OTHER (specify):	
						(6) CYANIDE		(6) OTHER (specify):		<u>WASH water</u>	
						(7) PHENOLS				<u>From heavy metals</u>	
						(8) HALOGENS				<u>herbicides</u>	
						(9) PCB				<u>blending</u>	
						(10) METALS				<u>operation</u>	
						(11) OTHER (specify):					

## V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

ARSENIC

ORIGINAL  
1/10/01

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

Recent information Dioxin may be on site

Sediment sample sent to Laboratory for Analysis - see Report

## VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

## VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

N/A

- ☐ 1. NPDES PERMIT    ☐ 2. SPCC PLAN    ☐ 3. STATE PERMIT (specify): \_\_\_\_\_  
☐ 4. AIR PERMITS    ☐ 5. LOCAL PERMIT    ☐ 6. RCRA TRANSPORTER  
☐ 7. RCRA STORER    ☐ 8. RCRA TREATER    ☐ 9. RCRA DISPOSER  
☐ 10. OTHER (specify): \_\_\_\_\_

B. IN COMPLIANCE?

N/A

- ☐ 1. YES    ☐ 2. NO    ☐ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name &amp; number): \_\_\_\_\_

## VIII. PAST REGULATORY ACTIONS

- ☐ A. NONE    ☐ B. YES (summarize below)

SAMPLED AREA FOR METALS AS RELATED TO Herbicide  
MANUFACTURING - NO CONTAMINATION FOUND

## IX. INSPECTION ACTIVITY (past or on-going)

- ☐ A. NONE    ☒ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
INSPECTION/SAMPLING	10-19-88	EPA	SAMPLES COLLECTED FOR METALS ANALYSIS

## X. REMEDIAL ACTIVITY (past or on-going)

- ☐ A. NONE    ☒ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
GRADED POND AREA	Sept. 1981	Facility	Drained & Graded Pond AREA to ORIGINAL LAND CONDITION.

NOTE: Based on the information in Sections III through V, fill out the Preliminary Assessment (Section II) information on the first page of this form.

July 24, 1981

Mr. Rich Steimle  
State of Maryland  
Office of Environmental Programming  
Department of Health and Mental Hygiene  
201 West Preston Street  
Baltimore, MD 21201

Dear Mr. Steimle:

REFERENCE: Permit A015

According to your instructions of June 15, 1981, we have de-watered our ponds at Whiteford, Maryland plant site. Sediment samples were taken from each pond and analyzed. A sketch of the sampling area and the analyses are attached.

We now request that you concur most promptly to having these ponds filled so to reduce potential liability, as well as to prevent re-use as a settlement or holding area. We have several projects scheduled here which cannot be completed until we do receive your approvals.

We'd further appreciate your review of our request of May 19 concerning the discontinuance of a waste permit requirement, once the fill and grading job is completed.

Again, thank you for your cooperation in these matters.

Don Fiery  
President

DEF/db

cc: Vid ✓

Attachment

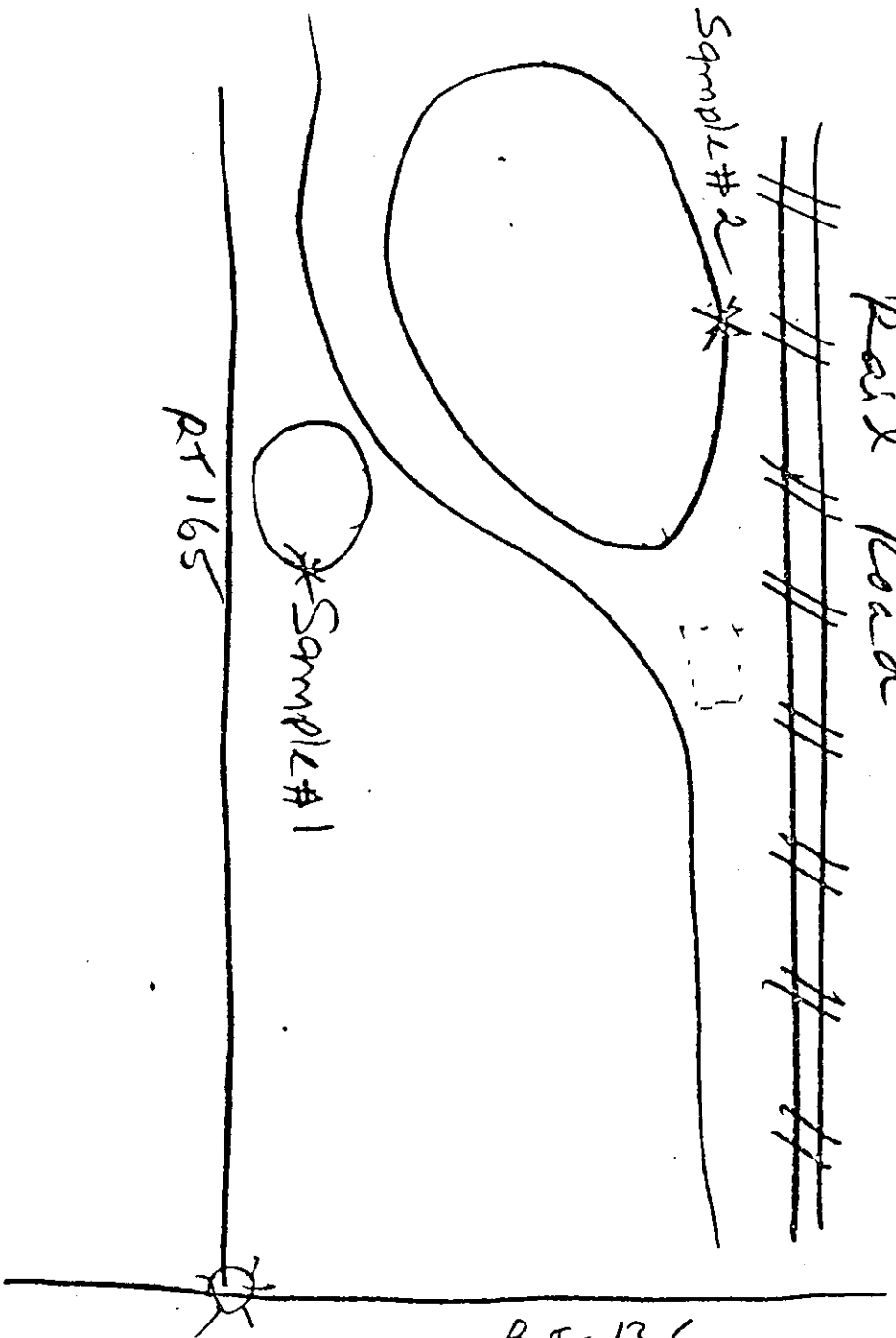
Rail Road

Sample #2 \*

\* Sample #1

RT 165

RT-136



# QUALITY SYSTEMS, INC.

CHEMISTRY - BACTERIOLOGY - TESTING - SALES - SERVICE

July 20, 1981

ROUTE 1

LITTLESTOWN, PA. 17340

(301) 876-2302

QS-3801

Mr. Akshay Vidyarthi  
Miller Chemical Company  
P. O. Box 333  
Hanover, Pennsylvania 17331

## R E P O R T

EP Analyses of samples received 7-12-81:


### #1 Pond near highway - dry

Arsenic	0.01 ppm
Copper	0.08 ppm
Chromium	0.00 ppm
Lead	0.00 ppm
Zinc	0.59 ppm

### #2 Pond near railroad siding - dry & dirt

Arsenic	0.00 ppm
Copper	0.00 ppm
Chromium	0.01 ppm
Lead	0.00 ppm
Zinc	0.07 ppm

Respectfully submitted,

  
Kenneth H. Mohlenrich  
President

KHM/sm



OFFICE OF ENVIRONMENTAL PROGRAMS  
**DEPARTMENT OF HEALTH AND MENTAL HYGIENE**  
201 WEST PRESTON STREET • BALTIMORE, MARYLAND 21201 • Area Code 301 • 383-5736  
Harry Hughes, Governor Charles R. Buck, Jr., Sc.D. Secretary

September 28, 1982

CERTIFIED MAIL  
Return Receipt Requested

Mr. Donald E. Fiery, President  
Miller Chemical Fertilizer Corporation  
P. O. Box 333  
Hanover, Pa. 17331

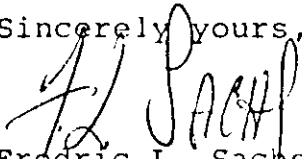
Dear Mr. Fiery:

Pursuant to the provisions of Health Environmental Article Section 7-257B5 Annotated Code of Maryland, this Office has determined that a Controlled Hazardous Substances (CHS) Facility Permit is no longer required for your site at Routes 136 and 165, Whiteford, Maryland 21160. Consequently, this Office, as previously confirmed, effective today, is revoking your CHS Facility Permit.

This decision may be appealed in accordance with the Administrative Procedures Act, Article 41, §244 et. seq., Annotated Code of Maryland by filing a request to the Office within 10 days of receipt of this letter.

If you have any questions regarding this decision please contact Mr. Reid Rosnick of my staff at the above number.

Sincerely yours,

  
Fredric L. Sachs, Chief  
Hazardous Waste Division

FLS:RR:lry

cc: Mr. Ronald Nelson  
Mr. Art Caple  
Mr. Paul Thompson  
File A-015

C O P Y  

September 1, 1982

Mr. Reed Rosnick  
State of Maryland  
Office of Environmental Programming  
Department of Health & Mental Hygiene  
201 West Preston St.  
Baltimore, Md. 21201

Dear Reed,

RE - PERMIT #A015

Enclosed please find a copy of our deed which has been registered in the court house as per your instructions. Please initiate proceedings to terminate our CHS PERMIT as per our discussion.

Thank you for your cooperation in this matter.

Very truly yours,

MILLER CHEMICAL & FERTILIZER CORP.

Akshay D. Vidyarthi  
Vice Pres. - Mfg.

ADV/dg  
Encl. 4

CC: D. E. Fiery



# Deed

---

MILLER CHEMICAL & FERTILIZER  
CORPORATION

TO

MILLER CHEMICAL & FERTILIZER  
CORPORATION

---

---

No. 226-P

Return to:

Miller Chemical & Fertilizer  
Corporation

P.O. Box 333

Hanover, PA 17331

# This Indenture

MADE the 2nd  
day of July in the year of our Lord one thousand nine hundred  
and eighty-two BETWEEN MILLER CHEMICAL &  
FERTILIZER CORPORATION, a Maryland corporation, party

of the first part, and MILLER CHEMICAL & FERTILIZER CORPORATION, a  
Maryland corporation, party

UG 11-82 B 221949 \*\*\*

of the second part: **Witnesseth,** That the said party of the first part, for and in  
consideration of the sum of One Dollar (\$1.00)-----

lawful money of the United States of America, to it in hand, paid by the said  
party of the second part, at and before the sealing and delivery of these presents, the  
receipt whereof is hereby acknowledged, has granted, bargained, sold, remised, released  
and quit-claimed, and by these presents does grant, bargain, sell, remise, release  
and quit-claim, unto the said party of the second part, and to its successors  
and assigns forever, ALL THAT CERTAIN tract of land situate in the Fifth  
Election District of Harford County, Maryland, on the northerly side  
of the public highway leading from Whiteford in said County to  
York County, Pennsylvania, containing 52 acres, more or less.

BEING the same and all the land described in a Deed dated  
March 4, 1942, from the Maryland-Pennsylvania Chemical Company to  
Miller Chemical & Fertilizer Corporation, recorded among the Land  
Records of Harford County, in Liber G.C.B. No. 271, Folio 231, etc.

The foregoing grant is under and subject to the following  
NOTICE: A portion of the premises has been used to manage  
hazardous waste and accordingly, its use is restricted under  
COMAR 10151.05.07G(3), that portion being described as follows:

Beginning at a concrete monument, said monument being North Thirty three (33)  
Degrees, Thirty seven (37 Minutes, Four (4) Seconds East, a distance of Six  
Hundred Three and Seventy six Hundredths (603.76) Feet from an iron pipe, said iron  
pipe being the property corner of Miller Chemical & Fertilizer Corp. and the  
southern Right-of-way Line of Md. State Route No. 165 Highway, thence along said  
Highway Right-of-way Line, North Thirty three (33) Degrees, Thirty seven (37)  
Minutes, Four (4) Seconds East, a distance of Six Hundred Seventy four and Eighty

three Hundredths (674.83) Feet to a concrete monument, thence, along lands of Miller Chemical and Fertilizer Corp., South Forty (40) Degrees, Twenty four (24) Minutes, Two (2) Seconds East, a distance of Seven Hundred Ten and Eighty three Hundredths (710.83) Feet to a concrete monument located on the northern Right-of-way Line of the Maryland and Pennsylvania Railroad System, thence, along said Railroad Right-of-way Line, South Thirty six (36) Degrees, Nineteen (19) Minutes, Eighteen (18) Seconds West, a distance of Seventy seven and Two Hundredths (77.02) Feet to an iron pipe, thence, continuing along aforementioned Railroad Right-of-way Line, by a curve to the right having a Radius of One Thousand Three Hundred Sixty two and Thirty Hundredths (1362.30) Feet, an Arc Distance of Six Hundred Thirty six and Fifty nine Hundredths (636.59) Feet, a Chord Bearing of South Fifty (50) Degrees, Forty one (41) Minutes, Fifty seven (57) Seconds West, and a Chord Distance of Six Hundred Thirty and Ninety six Hundredths (630.96) Feet to a point, thence, continuing along aforementioned Railroad Right-of-way Line, South Sixty three (63) Degrees, Six (6) Minutes, Six (6) Seconds West, a distance of Forty seven and Seventy one Hundredths (47.71) Feet to a concrete monument, thence, along lands of Miller Chemical and Fertilizer Corp., North Twenty nine (29) Degrees, Eight (8) minutes, Seventeen (17) Seconds West, a distance of Five Hundred Twenty nine and Sixty seven Hundredths (529.67) Feet to a concrete monument the point and place of Beginning. Said portion of Lands, as herein described, contain 10.3752 Acres, as per survey and description, performed by Dean R. Hempfing and Associates, Surveyors dated May 17, 1982, Drawing No. A-338-82-D1.

# ETC ENVIRONMENTAL TESTING and CERTIFICATION CORPORATION

DENIS C.K. LIN, Ph.D.

Vice President,  
Research and Operations

March 17, 1983

Mr. David Stewart  
Viar & Co.  
Sample Management Office  
300 N. Lee Street  
Second Floor  
Alexandria, VA 22314

Dioxin Sample  
Result  
Miller Chem + Fertil.


Dear Mr. Stewart:

We are pleased to submit the attached reports in response to your testing requirements. The data were acquired by my staff and we are confident that the results are of the highest quality.

If you have any questions regarding your report, we encourage you to contact Deb Holton, or Diane Foster in our Client Service organization (201/225-5600). They will coordinate your inquiries with the appropriate laboratory personnel. You are also invited to visit with Henry Beal, Esq. or Michael Bonchonsky, Esq., if you have any questions regarding the regulatory or the legal aspects of your project. Your account executives along with our Client Service organization are also available to assist you in defining the requirements for future testing programs.

If we can be of further service to your organization in the future, please contact us.

Sincerely,

  
Denis C. K. Lin, Ph.D.

DCKL:rp  
Attachments

cc: Dan Donnelly, EPA Region III, Anapolis, MD

## INTRODUCTION

This report contains the analytical results on your soil sample (Reference ID SAS No. 426-C), submitted on March 5, 1983. It is designed to satisfy the needs of your people at various levels in your organization.

The results we obtained on your sample are presented in a tabular format immediately after this page. Included with the sample results are the quality assurance data for your specific sample. The gas chromatograms and/or mass spectra generated in the analysis of your sample are included in the Appendix of this report. The chain of custody record for your sample is included at the end of this report.

The established methods we used in the analysis of your sample are described in the Methodology section.

We hope our report format is useful in assisting you to obtain pertinent information on your sample.

## METHODOLOGY

The method employed for the analysis of the 2,3,7,8-TCDD sample (Reference ID SAS No. 426-C), was the February 1983 draft revision of "Determination of 2,3,7,8-TCDD in Soil and Sediment," U.S. Environmental Protection Agency, Region VII Laboratory, Kansas City, Kansas. All samples were analyzed using an electron impact GC/MS instrument with a direct capillary interface.

The cleanup methodology employed was option A of the above method. A 60 meter SP-2340 fused silica capillary column was used for the analysis. The 50 ug/ml internal standard solution TCDD-<sup>13</sup>C<sub>12</sub> was obtained from KOR Isotopes, Cambridge, Massachusetts. The 10 ug/ml native TCDD solution was obtained from Supelco, Bellefonte, Pennsylvania, and checked against the EPA certified standard (from Radian Corp, Std. Code 20603) in iso-octane at 7.87 ug/ml. The elution times for the native and labeled standards are within 2.5 seconds.

## RESULTS

The accuracy of the analysis is directly dependent on the accuracy of the native TCDD stock solution. We used the certified standard from the EPA as the primary standard to calculate the values in the samples.

The Protocol calls for spiking a sample containing less than 10 ppb of TCDD at a level of 10 ppb. Since the only means to accomplish this is to use a previously analyzed sample, sample 568 of SAS No. 371-G was chosen for the matrix spike. The sample 568, using the certified standard for calculation, was ND for TCDD.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversions, remainders, rents, issues and profits thereof; AND ALSO all the estate, right, title, interest,

property, claim, and demand whatsoever, as well in law as in equity, of the said party of the first part, of, in or to the above described premises, and every part and parcel thereof, with the appurtenances.

To have and to hold all and singular the above mentioned and described premises, together with the appurtenances, unto the said party of the second part, its successors and assigns forever.

TRANSFERRED ON ASSESSMENT RECORDS  
C. JOHN SULLIVAN  
SUPERVISOR OF ASSESSMENTS

ON 11/11/82 By [Signature] Clerk

AGRICULTURAL TRANSFER TAX IN THE  
AMOUNT OF \$                       
SIGNATURE                     

Property Not Properly On County  
V. & S. System                      Per                     

In witness whereof, the said party of the first part to these presents hath hereunto caused these presents to be executed and its corporate seal to be hereto affixed.

SEALED AND DELIVERED

IN THE PRESENCE OF

MILLER CHEMICAL & FERTILIZER  
CORPORATION

BY: [Signature]

Its:                     

President

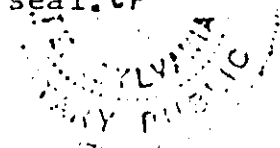
COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF

BE IT REMEMBERED, that on this 23rd day of July, 1982, before me, the subscriber, a Notary Public in and for the above Commonwealth and County, personally appeared Donald E. Fiery, President of Miller Chemical & Fertilizer Corporation, and that he, as such President, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as President.

IN WITNESS WHEREOF, I have hereunto set my hand and notarial seal. CF



RECORDED

NO.                     

AUG 11 1982

H. DOUGLAS MILCOAT  
CLERK

[Signature]  
Notary Public

DONALD E. FIERY, Notary Public  
CONEWAGO TOWNSHIP, ADAMS COUNTY  
MY COMMISSION EXPIRES SEP. 11, 1984  
Member, Pennsylvania Association of Notaries

111182-0709

No Taxes Necessary  
Balores E. Clarke Compt  
7/20/82 p.c. l.h.